REMARKS

The application has been carefully reviewed in light of the Office Action dated August 1, 2006. Claims 2 to 6, 10, and 11 are in the application, with Claims 2 and 10 being independent. Claims 2 to 5 and 10 have been amended herein. Reconsideration and further examination are respectfully requested.

Applicants note that the Office Action inadvertently included Claims 1 and 9 in the list of pending claims. These claims were cancelled in the June 21, 2006 Amendment.

Claims 2 to 6, 10, and 11 were rejected under 35 U.S.C. § 102(e) over U.S. Patent No. 6,228,575 (Gingeras). The rejection is respectfully traversed.

Claim 2 recites, *inter alia*, calculating a difference (F1, 0) between a mean value of fluorescence intensities of the fully complementary double-stranded nucleic acids without mismatch (F0) and a mean value of fluorescence intensities of double-stranded nucleic acids having one-base mismatch (F1), further calculating a difference (Fi+1, i) between a mean value of fluorescence intensities of a double-stranded nucleic acid having (i+1) base mismatches (Fi+1) and the mean value of the fluorescence intensities of the double-stranded nucleic acids having i-base mismatches (Fi), and identifying i being Fi+1, i << Fi, i-1.

Claim 10 recites, *inter alia*, a threshold value is set up between a fluorescence intensity corresponding to i base mismatch(es) and a fluorescence intensity corresponding to i+1 base mismatches based on a difference between a mean value of fluorescence intensities of i-base mismatches and a mean value of fluorescence intensities of i+1 mismatches.

Gingeras is not seen to disclose or suggest at least the above-discussed features.

Gingeras might be seen to describe a threshold of 50 counts above background. See Gingeras, col. 26, line 19. However, nowhere is Gingeras seen to describe how this threshold is chosen.

The dependent claims are also submitted to be patentable because they set forth additional aspects of the present invention and are dependent from the independent claims discussed above. Therefore, separate and individual consideration of each dependent claim is respectfully requested.

No other matters being raised, it is believed that the entire application is fully in condition for allowance, and such action is courteously solicited.

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Respectfully submitted,

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